

# Facilitating teachers' reflections on their affect 18 months after the February 2011 Christchurch Earthquake



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This article presents a subset of findings from a larger mixed methods CEISMIC<sup>1</sup> funded study of twenty teachers' earthquake experiences and post-earthquake adjustment eighteen months after a fatal earthquake struck Christchurch New Zealand, in the middle of a school day (Geonet Science, 2011; O'Toole & Friesen, 2016). This earthquake was a significant national and personal disaster with teachers' emotional self-management as first responders being crucial to the students' immediate safety (O'Toole & Friesen, 2016). At the beginning of their semi-structured interviews conducted eighteen months later, the teachers shared their earthquake stories (O'Toole & Friesen, 2016). They recalled the moment it struck in vivid detail, describing their experiences in terms of what they saw (destruction), heard (sonic boom, screaming children) and felt (fright and fear) as though they were back in that moment similar to flashbulb memory (Brown & Kulik, 1977). Their memories of the early aftermath were similarly vivid (Rubin & Kozin, 1984). This article focuses on how the mood meter (Brackett & Kremenitzer, 2011) was then used (with permission) to further explore the teachers' perceived affect to enlighten their lived experiences.

## Mood Meter

The mood meter (Figure 1) is a self-report tool in the form of a four-quadrant grid to measure core affect (Kuppens et al., 2007). Drawing on the circumplex model of affect (e.g., Posner, Russell & Peterson, 2005), the mood meter invites participants to self-assess their physiological state along two dimensions of valence (pleasantness) and arousal (energy). The mood meter was presented and explained, and the teachers were invited to consider how they were feeling.

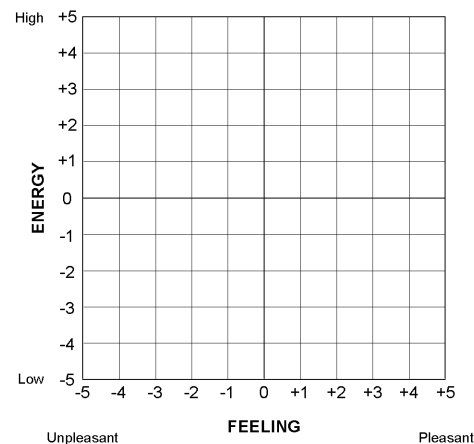


Figure 1. The mood meter used by teachers to record how they were feeling<sup>2</sup>

The teachers (T) were guided in this process by starting with the present moment. For example, the interviewer (I) picked up on an earlier point:

I: You've mentioned the word energy, how is your energy level just right this minute?

T: Probably a 3.

I: Now is there a pleasantness or an unpleasantness associated with that?

T: Neither.

I: Neither, so you'd be about neutral?

T: Yeah, yeah.

I: Ok. And what would you label that...if you had to find a word to say what the feeling is, what would be the word for you that would describe the state you're in?

T: Very neutralish sort of, yeah.

<sup>1</sup> Canterbury Earthquake Digital Archive:  
<http://www.ceismic.org.nz>

I: Neutralish?

T: Yeah.

I: Anything else that goes with that?

T: No, it reminds me that actually ... one of the things I've really noticed is that I don't have...like I'm normally the sort of person that bounces out of bed and I haven't. I don't bounce out of bed any more (cited in O'Toole, 2018).

Another teacher rated her energy as +2 and continued:

T: I'll go pleasant, yeah. I'm probably about hereish (pointing to +2).

I: Ok. So, in that spot and in that state, how would you name that?

T: Um, tired but ok. That's not very eloquent, is it?

I: Doesn't matter. The thing is there's no right or wrong with this.

Having understood the mood meter process for the present moment, all 20 teachers plotted their perceived affect for three different contexts: 1) as recalled during the early aftermath; 2) at the time of the interview, and 3) as their perceived tendency during current teaching. *Early aftermath* denotes the time frame extending beyond their first earthquake response, including their return to work and a further school-day earthquake on 13<sup>th</sup> June, 2011.

Recalling the early aftermath, sixteen teachers plotted their affect as recalled 18 months later as being mainly unpleasant (Table 1). In contrast, in the present moment, the most commonly reported affect was an almost mirror image positive report.

**Table 1. Frequencies of coordinates selected in mood meter quadrants on three occasions**

<b>Mood meter quadrant <sup>a</sup></b>	<b>Early Aftermath N=20</b>	<b>18 months later present moment N=20</b>	<b>18 months later teaching N=20</b>
Positive pleasant Positive energy	3	17	18
Neutral Pleasant	0	1	0
Neutral Energy	0	0	1
Positive pleasant Negative energy	1	0	0
Unpleasant Negative energy	11	1	1
Unpleasant Positive energy	5	1	0

<sup>a</sup> Sequentially clockwise from the top right quadrant.

<sup>2</sup> Copyright 2011[Table] by Marc Brackett and Janet Pickard Kemnitzer. Reprinted with permission.

Positive affect as recalled during the early aftermath resulted from feeling helpful. The teacher in the positive pleasant yet negative energy quadrant, remembered feeling, “fearful [but] you’ve got coping mechanisms, strategies”. Unpleasant affect reflected teachers’ recalled early intense fear and school impacts, loss of home and city amenities, tiredness, and ambivalence about returning to work within three weeks, consistent with international post-disaster teacher findings (Devaney, Carr & Allen, 2009; Long & Wong, 2012). Some teachers in this quadrant recalled their adrenaline response lasting well beyond their first responder actions (+5, -5). Others recalled their grief over loss, frustration with the practical problems relating to school damage, site-sharing with other schools, loss of resources, and anxiety: “I think we were nervous, thinking *what if there’s more*”. One teacher explained, “It’s a maintenance kind of thing, beyond survival”, having to be “constantly” prepared with earthquake contingencies. Another teacher recalled that “it was more unpleasant than pleasant and coming out of it took a long time. Everyone was tired for a long time and with the after-shocks through the nights, I wasn’t sleeping well at all so then, that doesn’t help”.

In contrast, 18 months later, the majority of the teachers were feeling more positive at the time of their interview. In response to the question as to where they would plot their affect during their current teaching (Table 1), 18/20 teachers, rated their core affect as pleasant and positive, with perhaps less than optimal energy, such as: “tired”, “flatter”, “mediocre” or “lost my mojo”, consistent with international findings on post-disaster teacher impacts (Qi & Wu, 2014). Descriptions such as “normalizing” and “presenting a teaching persona” indicated a process of acting as expected, rather than as a natural experience, indicating an emotional labour approach (Hochschild, 1983; Grandey, 2015). Descriptions of their classroom energy and positive affect automatically elicited their emotion regulation strategies (cf. Sutton, 2004) that “put” them into this state, such as having fun

with the children and positive self-talk, practicing tai chi (O’Toole, 2017). Only one teacher rated her teaching affect as almost extremely negative at -4, -4, and was taking a teaching break at that time.

In summary, the mood meter process facilitated a useful segue into further interview exploration of their experiences, to more fully inform their quantitative data including their burnout (O’Toole & Friesen, 2016). Acknowledged limitations include the small sample size and the validity and reliability of self-report methodology. The teachers’ recollections eighteen months later may not be accurate reflections of their peritraumatic experiences (Kannis-Dyand et al., 2015), and their affect at that time may have been influenced by factors that cannot be recalled (Oatley & Duncan, 1992). However, affect and emotions as self-reports are “subjective phenomena and have an objective existence” (p. 282), and their use can be defended when seeking personal perspectives (Csikszentmihalyi & Larson, 1992). Self-reports may be susceptible to social desirability bias (Parayitam & Dooley, 2007), including biased towards the response of the listener (Pasupathi, 2003). However, Freitag Grimm and Schnidt (2011) found no significant differences in survivors’ use of affect-related vocabulary from 306 days up to eight years after a disaster, even demonstrating more insight latterly. Although retrospective appraisals may be “post hoc reinterpretations” (Bennett, Lowe & Honey, 2003, p. 519), in the absence of contextual contradictions, they can be useful. These and other limitations may be countered by the richness of the qualitative data possible, and the similarity of the findings to previous Christchurch earthquake research on peritraumatic cognitions (Kannis-Dyand et al., 2015), and teachers’ burnout (Kuntz, Näswall & Brockett, 2013).

A full paper is in preparation as is a conference presentation for the SEL SIG at AERA 2019.

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## Inspiring a Generation of Hummingbirds for our Future



**Lize Rech and Susan Stillman**

Six Seconds Emotional Intelligence Network

*As a wildfire consumed the forest where the hummingbird lived, all the animals stood watching*

*the fire, overwhelmed and doing nothing. The hummingbird decided to do something about the fire. It flew to the nearest stream and got some water in its beak to drop on the fire. It did this again and again. The animals mocked the hummingbird for its efforts saying it would make no difference. The hummingbird took no notice telling them, “I am doing the best I can!”*

The hummingbird story was a favorite of Dr. Wangari Maathai, the founder of the Green Belt Movement and the first environmentalist to win a Nobel Peace Prize and honors her legacy. An activist, Dr. Maathai became internationally recognized for her work fighting for democracy, human rights, and environmental conservation.

Wanjira Maathai, daughter of Wangari Maathai and Chairwoman of the Wangari Maathai Foundation (WMF), is working to create a generation of ethical and courageous leaders. She emphasizes, “Underneath it all, when you cut through all the confusion, it is . . . social emotional skills – or a lack thereof – that are responsible for the biggest and most important challenges of our time.”

In partnership with Six Seconds, a global not-for-profit emotional intelligence organization, WMF recently launched the Hummingbird Leadership Project – a personal leadership and character-building program for preteens and teens designed to inspire a new generation of principled citizens and activists in Kenya. They asked: *What are the measurable emotional skills young Kenyans will need to protect the future?*

The WMF defined 8 key values, including Courage, Integrity, and Responsible Stewardship that they felt were crucial to instill in the next generation of leaders. They wrote these into a values-based curriculum that will be implemented in Life Skills and Social Studies lessons aligned with the Kenyan National Curriculum.

Six Seconds was brought on board to measure the school climate using their Educational Vital Signs assessment, enabling the board and principals to decide on interventions for the teachers and support for the Hummingbird Leadership Program Curriculum.